FOR BETTER ROADS.

COLUMBIA UNIVERSITY TO HAVE A ME-CHANICAL DEPARTMENT FOR THE TESTING OF ROAD MATERIALS.

the League of American in the Vanderbilt Building, yesterday, time ago a prominent member of the Leagu tion to President Seth Low of Columbia Uni rsity, suggesting that a mechanical department esting of materials for roads might Atad to the engineering department of the Uniand named Professor William H. Burr to Belding, it., H. B. Fullerton and Louis and as the League officials promised a department to the University

o give the young engineers a practical I'nder the old conditions the best roads, and then again they might department will do much good in this have been dumped into the roads by care

igue of American Wheelmen, said:

ork State has not within its own boun terial in order that the value of materials nd within the borders of the State for roadses might be ascertained scientifically. w-York State Museum at Albany (a branch

FOX HUNTING.

J. J. DWYER TAKES HIS PACK OUT AT LAKE-WOOD FOR THE FIRST TIME.

will be fox hunting in the "Land o'

will be hunted in private. Mr. Gould grew

'Willie" Dwyer, was first whip, and Frank farm the trail lay. Three of the farms of the latter estate were crossed at angles, and the Estel and Ward farms were traversed at top speed. The run had lasted nearly an hour, and some unusually stiff jumping had winded some of the best horses when the sun began to go down. It was then deemed advisable to whip the does off the sent. Back to kennel was the bugie call, the hardest of all for the hounds to snawer. "Charrie" Robbins, who rode Beaufort, made a sensational jump over a sus-foot fence and ditch into a lane and another six-foot sail into farm and again. It was a fine performance, and elicited considerable applause from men who know what steeplechasing is. Mr. Robbins developed Tycho Brahe, who holds the world's record for high lumping. The hounds will meet at Laurel-in-the Pines on Tuesday and at the Lakewood Hotel on Thursday and Saturday next.

SHOOTING.

CRESCENT ATHLETIC CLUB CONTESTS. The regular weekly shoot of the Crescent Athletic Club was held at the club grounds, at Bay Ridge, yesterday afternoon. There was a large number present. Up to date only three members are eligible for this month's cup. E. H. Lott and J. H. Hallock are making a hard fight for the prize, and if Schence Remsen does not compete next Saturday the battle will be between the two named. In Festerday's shoot for the panels of woodcock known as the Woodcock Handicap the two rivals tied, with their allowances, on the limit. In the shoot-off they again tied on 25, and then Charles A Sykes, the chairman of the Shooting Committee, decided to present to each one of them a panel, although one of them was intended for Monday's shoot.

RACING.

San Francisco, Dec. 24.—Weather clear and Grack fact at Ingleside to-day Summaries:

First race (one mile)—Cossine, 65 (Devin), 1 to 2, won;

MacFarlane, 112 (L. Fowell), 4 to 1 and 3 to 2, second;

MacFarlane, 112 (L. Fowell), 4 to 1 and 3 to 2, second;

MacFarlane, 112 (L. Fowell), 4 to 1 and 3 to 2, second;

MacFarlane, 116 (Spencer, 2 to 1, third. Time—1:44

Martin, 3 to 5 won, First Call, 104 (N. Turner),

4 to 1 and 3 to 2, second; Lady Hurst, 107 (Spencer),

5 to 1 third. Time—1:485;

Third race (selling, one mile)—Cabrillo, 117 (H. Martin),

1 to 2 won, Peter II, 122 (Spencer), 3 to 1 and 6 to 5,

1 to 2 won, Peter II, 122 (Spencer), 3 to 1 third. Time

1 to 2 won, Peter II, 122 (Spencer), 3 to 1 and 6 to 5,

1 to 2 won, Peter II, 122 (Spencer), 3 to 1 and 6 to 5. th race (six furiones)—Hohenzollern, 110 (Spencer), won, Zamar II 107 (H. Martin), 3 to 5 and out, Guider, 167 (McNickels), 15 to 1, third Time race (seither six furloags)—Ed Gartland II. 102 rith) 4 to 5, won; Mainstay, 106 (Spencer), 5 to 1 1, second: Cyril, 104 (N. Turner), 2% to 1, third.

RESULTS AT NEW-ORLEANS. New-Orleans, Dec. 24.—The Christmas Handicap. for all ages, at a mile, valued at \$1,600, was the feature of the day's card. "Tommy" Burns's riding landed the prize for his employers, J. W. Schorr & Son, of Memphis, whose candidate, Macy, had only a short head the best of it at the wire. Mo-Cafferty's Loiterer was the favorite, and made all the running. Combs being outridden in the last few jumps. Debride and Clay Pointer were the only winning favorites. The weather was cloudy and the track good. Summaries:

the Brack good. Summaries:

1 race (six furiouss) Debride, 107 (O'Connect, 11 to

2 sim W. 107 (Lynch), 4 to 1 and 8 to 5 second:

8 in W. 107 (Crisery), 6 to 1, third. Time-1-1554;

6 d race (handlesp, five furiouss) Villace Pride, 96

1037, f to 1, won; Frank Bell, 122 (Foucon, 9 to

105; Gold Fox, 101 (Brophy), 20 to 1, third. Time-

1688, Third race (selling one mile and three-eighths)—Clay Third race (selling one mile and three-eighths)—Clay Pointer, 98 (O'Connor), 11 to 5, won; Double Dummy, 190 (Bothernoid), 16 to 1 and 3 to 1, second Martit, 98 (Frosti 9 to 2 third Time—2.24%; Pourth race (Christmas Handleap; one mile)—Macy, 117 (T. Bains), 5 to 2 won; Luterer, 110 (C. Combes, 8 to 5 (roughed with Handsel), second; fields of Memphia, 108 (Class), 12 to 1, third Time—1.42%; Pitth race (one mile and one sixteenth, selling)—Sister Fifth race (one mile and one sixteenth, selling)—Sister Real, 29 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 29 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 29 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25 (Crox-Bella, 25 (Hothersol), 10 to 1, won; Bequeath, 25

TOD SLOAN ON HIS WAY WEST.

Kokomo, Ind., Dec. 24.—Ted Sloan, the jockey, has arrived here to spend Christmas with his foster parents, Mr. and Mrs. D. G. Blouser. This is his first yes. first visit at home since the beginning of his turf career ten years ago. He was accompanied here by

ICE YACHTING.

ITS ORIGIN AND PRACTICE SOME NOTED AMERICAN CLUBS.

Several attempts have been made to suggest that There is no doubt that the highest teeboat speed has been attained here, but the origin waterways of Holland. It seems probable, too, parts of Northern Europe by people who had to take their market produce long distances for sale. were in shape much like the body of the that the body of the wagon was in most cases It may now be several hundred years too late to to windward, but, although the Dutch did not get ndward very fast in any kind of craft seems reasonable to suppose that a seafaring folk would soon develop in their ice market boats an

The first boat that is said to have appeared in The runners of this square craft are still preserved at Poughkeepsle, on the Hudson. It is sixty years then seems to occur before there was any further iceboat-building. In 1850 another was River, that carried a small lug sail, and was an Dutch craft for market produce. Even as late as 1856 the iceboats of this region were in a highly primitive condition, some in this year having been

the iceboats used on the bay at Toronto were practically the same as they are to-day. Except in special builds for racing, there is little difference Evans, of the Royal Canadian Yacht Club, and the subsequent boats owned by him and by Thomas Tinning, the champton carsman, and others, were all of triangular shape, with the single steering skate aft. In this region the iceboat was devel-oped, not primarily for racing, but for the taking out of large parties from the yacht clubs and for general joility in the long winters.

Since those early dates ice yacht clubs have been established in all directions. Like the Alpine edel-

SEAWANHAKA CUP AFFAIRS.

When Charles A. Sherman, of the Seawanhaka When Charles A. Sherman, of the Seawanhaka Corinthian Regatia Committee, was asked a few days ago about the arrangements with the Montreal Club, he did not care to say anything for publication till something definite had been arrived at. The proposals made by the Seawanhaka Club in regard to altering the shape and character of the regard to altering the shape and character of the boats to run for the challenge cup have not been told by any one here, but at the Montreal end of the conference no reason for secrecy has been discerned, and it has been there announced that the new proposal is chiefly that the competing boats shall each carry eighteen hundred pounds of ballast on the keel.

If more members of the Regatta Committee here WINNERS AT INGLESIDE.

San Francisco, Dec. 24.—Weather clear and track

Louis it would have been known that this newly Louis it would have been known that this newly proposed boat was a physical impossibility in the shallow waters in which the races have to be sailed, and the club in Canada has replied to this effect. What the outcome of the proposed changes will be, and whether or not the Seawanhaka Club will make any further suggestions, remains to be seen but one thing is practically assured. will be, and whether or hot the Seamanaa to be seen; but one thing is practically assured, and that is that the further races will have to be with boats is that the further races will have to be with boats similar to those which have already contested in the mean time, January is close at hand, and in the mean time, January is close at hand, and designers who might give the matter attention are wholly at sea, owing to the fact that nothing has yet been settled about the character of the boats that will compete. Good designing has never been accomplished in haste, and at least two good yachtsmen have said that if any further delays occur in the failures of new proposals or otherwise they would not be surprised if no contest for this cup came off next year.

As it is, Mr. Puggan is giving the whole of his spare time to the designing of a boat to defend the Canada cup in the challenge from Chicago. In regard to the published report that he "has orders for three boats for the Seawanhaka Cup," it may be remembered that as an amateur, working purely for pleasure and good sport, he does not take "orders" for hoats, and also that both he and Mr. Crane have said positively that they would not design again for this trophy.

NEWS OF THE YACHTS.

The departure of the unfinished yacht Corsair from Newburg was hastened owing to a fear that she might be frozen in at the yards where she was launched. She has therefore been towed to the yards of Fletcher & Co., at Hobbken, where she will be completed for Commodore Morgan of the New-York Yacht Club

Builders in England have been careful about accepting the offer to build the Shamrock, and in one case at least, that of Yarrow, it is known beyond doubt that the offer was declined. This has been understood in England to be a reasonable business precaution, because it is well known that Fife has designed this boat to be built in the lightest possible manner and of peculiarly light materials, and as the usual eighty tons of balast will probably have to be carried across the ocean on this frail hull, builders of high reputation are not in a hurry to risk their names in the venture. They are not blamed for seeing the bazards beforehand, for these have been canvassed and argued ever since the Defender was built.

ernment of the clubhouse will be by a special com-mittee instead of a board of trustees. The office of mittee instead of a board of trustees. The office of Rear-Commodore will be created and provision

George Lord Day, of the New York Yacht Club, is now sailing by easy stages toward America in his known schooner yacht, Fleur-de-Lys. On leaving Nice it was proposed to touch at Tangiers, Ma-deira, the Canaries, the Cape Verd Islands and Porto Rico. With Mr. and Mrs. Day on board are Gaston and Ernest Fournier.

In the Royal St. Lawrence Yacht Club, at Mor treal, the next year's contests for the Scawanhaka Cup have been relegated to a special committee of three, of which A. F. Riddell is chairman. This is altogether distinct from the ordinary sailing com-mittee of the club, which, to quote from a Canadian paper, "will confine itself to the home interests of the club and its own races, and will be expected to see that the Seawanhaka races do not interfere with these."

Two big English yachts are coming to America

The German Emperor has now given orders that his yacht, the Meteor, shall be turned into a yawl and be furnished with new sticks all around.

again late in January, with a new skipper, Charles H. Greenlaw, in charge. It is said that a Mediterranean cruise is in contemplation, and that the owner, George W. Childs Drexel, and Mrs. Drexel, will join the yacht later on at Marseilles.

yacht now being built for Queen Victoria at Pembroke. This extraordinarily large gang is said to be necessary to get the boat launched in March. The yacht is 350 feet long by 50 feet beam.

BASKET-BALL.

PRATT DEFEATS JAMAICA HIGH SCHOOL An interesting game of basket-hall took place between Pratt Institute and the Jamaica High School at the latter's gymnasium. Pratt won by a score of 10 to 5, Nash and St. John, of Pratt, and Smith, of Jamaica, making the goals.

THE COULDOCK BENEFIT.

TO BE GIVEN NEXT FRIDAY AFTERNOON FOR THE GRANDDAUGHTER OF

lumns that the benefit which was planned for Charles W. Couldock just before his death will be given for his granddaughter, Hazel Couldock. will be at the Knickerbocker Theatre, on Friday the money derived from the benefit given at The decision to go on with the nefit of the actor's grandchild was made be of Mr. Couldock's own request, contained in the following letter, written a short time before his death to the projectors of the benefit:

November 10, 1898.

Dear Joseph Jefterson, Daniel Frohman, Joseph Brooks-I'm suffering great pain in my chest and back—the region of the heart—it came on quite suddenly—also pain in my arms—down to the tips of my fingers. It may be the beginning of the end. If I die, do, pray, let the benefit take place for the sake of my darling grandchild and her mother. Fray do as I request, and may God bless you all. The balance of the money in trust company I should like paid my grandchild at the same rate that it has been paid to me.

If the Actors' Fund will bury me, I should like to lie in their lot. I would prefer being buried by the Actors' Fund, so that the 80 from the Elks need not be spent on my funeral.

C. W. COULDOCK.

TRADE WITH AUSTRALIA.

WORK OF A REPRESENTATIVE OF THE PHILA DELPHIA COMMERCIAL MUSBUM.

Philadelphia. Dec. 24.-C. A. Green, assistant chief of the Bureau of Information of the Philadelphia Commercial Museum, who is a member of the Museum's Commission to China and other Oriental for some time, studying the opportunities for the extension of American trade. Mr. Green left China in the latter part of August, and during September visited Singapore, the Straits Settlements and the cities of Batavia and Soerabaija, on the Dutch island of Java. He then proceeded to Australia, visiting Brisbane, the capital of the colony of

island of Java. He then proceeded to Australas, visiting Brisbane, the capital of the colony of Queensiand, and going subsequently to Sydney, New-South Wales.

Mr. Green attended a meeting of the Brisbane Chamber of Commerce, at which he delivered a speech describing the Commercial Museum and its work. In the discussion which followed, the members of the Chamber of Commerce gave utterance to the kindliest expressions toward the United States, and Indicated a desire versing on anxioty to extend their trade with this country.

Mr. Green also delivered an address before the Chamber of Commerce in Sydney, which gave him a reception. The newspaper clippings which Mr. Green sent to the Museum indicate that the feeling in Bydney toward the United States is most cordial, and a strong desire exists for a further extension of trade between the two countries.

Mr. Green spoke before the Chamber of Commerce of Newcastle, New-South Wales, and was followed by Dr. Goding, United States Consul at Newcastle, who read a short paper upon trade between the United States. Pretiminary steps were taken at this meeting to have the Newcastle Chamber of Commerce affiliated with the Museum's Advisory Board.

WHAT IS A SEAMLESS TUBE?

From The Iron Age.

Henry Souther said, at the recent meeting of the National Association of Mechanical Engineers, that the scientific and technical designation of a tube, whether seamed or seamless, depended soiely upon the tube itself, and not upon the process followed in its manufacture. Referring to the dictionary you will find that the word "seamless" means without seam, which conveys no light upon the subject. Turning to the word "seam," it is found that it is defined as a joint, suture, or line of union, and here in the last term we find the key. A tube jointed in any way cannot be seamless. If, in the primary stages of its manufacture, it he lap, but or lock jointed, it cannot by any subsequent operation be deprived of the seam, and therefore cannot be considered, when completed, as being seamless.

cannot be considered, when completed, as being seamless. A strictly seamless tube may be made by any one of three operations. First, a billet may be, by successive steps, punched into the form of a tube with extremely thick sides; and these may then, by the ordinary drawing processes, he reduced to a tube with thin walla. Next, the billet may be bored, or the blank may be cast with a hole in it, and in either case then drawn to the required dimensions. Thirdly, the tube may be made by the cupping process, which consists in taking a disk of the metal, forming it into a cup shape, gradually elongating the cup and reducing it in diameter, and finally by this means producing a tube.

diameter, and finally by this means producing a tube.

Each and all of these processes yield a tube which is absolutely scamless, and about which there is and can be no dispute. In all tubes formed with a soam the edges have first been scharated, then united, either by lap or but weld, or by some lock-joint system, and in these the joint cannot be eliminated by any after processes. The Custom Houses of the United States recognize the difference between a seam and a scamless tube. A seamless tube is one in which the walls have never been separated from the time the metal was in a molten condition to the time of the completion of the tube.

MARTELLO TOWERS IN ENGLAND. From The London Chronicle.

baye to be carried across the ocean on this frail hull, builders of high reputation are not in a hurry to risk their names in the venture. They are not blaimed for seeing the bazards beforehand, for these have been canvassed and argued ever since the Defender was built.

The Pavonia Yacht Club has elected the following officers for the ensuing year:

Commodore, David W. Kohn; vice-commodore, William B. Wilson; fleet captain, John Wright; fleet surgeon, Dr. Louis Bowman, financial secretary, William F. Tobin; corresponding secretary, William F. Tobin; corresponding secretary, William F. Tobin; corresponding secretary, William A. Miller; treasurer, Louis Mittelsdorf, measurer, A. P. Curtis; Board of Trustees Colonei mattee. Norman L. Rowe, James Morey, John A. Milters, treasurer, Louis Mittelsdorf, mittee. Norman L. Rowe, James Morey, John A. Milters, treasurer, William Willis and John W. Target.

Zimmerman, William Willis and John W. Target.

Zhanges ere to be made in the constitution and bylaws of the Hudson River Yacht Club. The gov-

BUNCE RETIRES TO-DAY.

HE WILL, HOWEVER, CONTINUE AS COM MANDANT OF THE NAVY YARD.

REAR-ADMIRAL'S LONG AND BRILLIANT CAREER NOTES FROM THE YARD.

Rear-Admiral Francis M. Bunce, who is the rank to-day his sixty-second birthday, and as he reaches spite the fact that he was wounded by the It was on May 1 1897, that he was detached and ordered to take charge of the Brooklyn Navy nterruption since that time. On February in the Civil War, and in his long career in the Navy he has been assigned to do much work which When it was learned that his name would that it meant his forced withdrawal from the Admiral Schiev. Secretary Long decided, however, that the Department needed the services of Ad-miral Bunce at this time, and in view of this he

Admiral Bunce has been often referred to as a sailor of the old school. It is true that he comes from the old class of sailors, but as he has ever been alive to the constant changes that have taker

peace treaty with Spain is ratified.



ughly cognizant of the usages and conditions of from the Naval Academy, in Annapolis, and soor after graduation was attached to the gunboat Ger mantown, of the East India Squadron. In 1869 he was made past midshipman and assigned to the ressel was then engaged in survey work. A year pointed executive officer of the Penobscot. While ne was the executive officer of the ship it took part the disembarkation of the heavy artillery and ars for use in the batteries in the investment

Fisher and Caswell he commanded a successful ex-pedition up the Little River, between North and arge quantities of cotton, turpentine and rosin, and tion of his services, made him prizemaster of the n November, 1862, and was then ordered to the ships of the South Blockading Squadron.

part in the operations on the Stone River, South | tur Carolina. In 1933 he was commissioned lieutenantcommander, and on July 10 of the same year commanded the naval manœuvres in the combined as-sault of the land and sea forces which resulted in the capture of Morris Island. He was again highly to the monitor Patapace, and took part in all the actions in the siege of Charleston and in the night attack upon Fort Sumter. For his part in these engagements he received honorable mention.

In November, 1863, he was wounded by the ex-

plosion of a carridge. He quickly recovered from the effects of his wound, and was appointed on the staff of Admiral Dahlgren. While thus attached he had charge of the scouting and picket boats of staff of Admiral Dahlaren. While thus attached he had charge of the scouting and picket boats of the squadron before Charleston. In September, 1894, he was ordered North to assume command of the monitor Monadnock, and was in charge of the monitor when she made her celebrated trip between Philadelphia and San Francisco. That was the first extended sea voyage ever made by a vessel of her class. For that service he received the thanks of the Navy Department, and was recommended for reward by the Secretary of the Navy to the President. At the end of the Civil, War he was assigned to the command of the Charleston Navy Yard, Boston. In 1871 he was commissioned commander, and in 1883 captain. On March 1, 1895, he became commodore. In 1896 he was placed in command of the North Atlantic Squadron, succeeding Rear-Admiral Meade.

The Missachusetts is probably destined to a long stay at the Yard, although workmen are as busy as possible repairing the damage to her keel plates. The report of the Court of Inquiry will not be made public until after it reaches Washington.

Replacing the portion of the sea wall near the Cob Dock ferry, which caved in some time ago, has been started, and rows of sheet piling are being driven on the line of the outer edge of the sea wall. A similar row is being driven on the other side of the ferry slip for the new wall which is being constructed there.

The Yard tug Traffic is having an overhauling in the stone drydock, but will be out in a short time. The upper works of the Port Royal tug Pennacook are nearly completed.

In the machine shops there is a lot of work on the machine vo of the Newark and the Indiana, and the men are kept at it in relays.

TROUBLE OVER A NOTE.

THE MAN WHO DREW IT SAYS HE DID SO THROUGH FALSE REPRESENTATIONS.

nalls, appears as chairman of the East Tennessee Land Company, in a litigation which was brought before Supreme Court Justice Samuel T. Maddox, in Brocklyn, yesterday morning. Dr. Charles E. 1896, he executed a note for \$3,000, to Dr. Funk, as was one of a company of twenty subscribers. The note was indorsed by Dr. Funk, and sent to the Astor Place Bank which delivered it to Benjamin Astor Flace Bank which delivered it to Benjamin.

F. Girding. Girding began suit to collect the note. Welch alleges that he was induced to sign the note through the false representations of an agent of Dr. Funk. He now asks judgment, enjoining Girding from prosecuting the action, and asks that the note be delivered to the clerk of the court.

Dr. Funk says that Girding was not authorized to collect the note, and Justice Maddox granted an injunction restraining Girding from prosecuting the action in Westchester County.

DOCTOR'S HOUSE BURNED OUT.

CHRISTMAS GIFTS IN A BASEMENT CUPBOARD

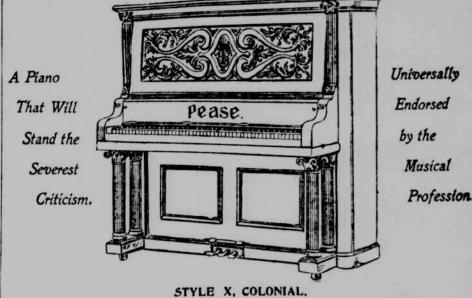
Twenty-fifth-st was more than half destroyed by fire at 5 o'clock yesterday afternoon. Dr. William Frederick Holcombe, who had an office on the first floor, lost \$1,000 worth of furniture, instruments and books, and Mrs. Ward, who recently purchased the house from Dr. Holcombe, lost \$5,000 on the building and furniture.

Three servant girls were in the basement when the fire started, on the second floor. It was discovered by Policeman Whalen, of the West Thirtiethst. station, who saw smoke coming from the windows and summoned the firemen. He then alarmed the servants, who beat a hasty retreat to the street. Mrs. Ward was out buying Christmas gifts for her three young children, who were playing in Madison Square Park. They knew nothing of the firemen washing down. Everything in the firemen washing down. Everything in the house appeared either to have been burned or drenched with water. A number of Christmas gifts designed for the Ward children, and which were apart from any question of politics, but there are

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OPEN EVENINGS UNTIL JAN. 1st.

THE BOSTON PUBLIC LIBRARY.

EXTENSIVE ALTERATIONS RECENTLY MADE IN ITS BUILDING.

The necessity for careful planning and foresight in the construction of library buildings, that they may be not simply beautiful, but also thoroughly workable, has been demonstrated afresh by the experience of the management of the Boston Public Library. Although the new building has been occupied only about three years, yet it has already been found necessary to make extensive alterations. the building was erected the library did not have its present thoroughly efficient librarian, Herbert Putnam. The building was erected under the direct tion of the trustees, who were not practical if

built, but in efficient administration it has been found deficient.

At the request of Mr. Putnam \$100,000 was appropriated to make certain changes, all of which are in the interest of improved administration. The work was begun last July, and will be completed, according to "The Boston Transcript," within a month. During the progress of these changes the business of the library has not been suspended for

One of the most important improvements has been in the system of heating and ventilation, which, by means of a new fan and the substitution of steam for hot water colls, will hereafter prob ably prove adequate. The other alterations have ably prove adequate. The other alterations have been mainly for the purpose of increasing the ca-pacity of existing departments, providing for new departments and rearranging for economy of ad-ministration. Some of the most important changes and extensions "The Transcript" describes as fol-

ministration. Some of the most important changes and extensions "The Transcript" describes as follows:

"The children's department is to be augmented by the addition of the present patent-room adjacent to it. This is to be fitted up as a children's reference reading-room, with a good reference library, including maps, photographs, etc., useful to children in their school work. In the gallery of this room will be a kindergarten library for teachers, augmented from the present collection.

"The old system of pneumatic tubes, involving fifty-six stations in the building, has been overhauled, and new and improved terminals substituted. The twenty-eight terminals in the delivery-room, formerly stretching in a line, have been grouped in a circle for more speedy operation. In addition, an auxiliary system of improved tubes (operating by suction, instead of by pressure), has been installed, which not merely connects the delivery room with each one of the six stacks and with the special libraries floor, but connects every stack with every other stack, so that slips may be seen from stack to stack without being returned to the delivery-room. In addition, a piece of apparatus has been installed in the delivery-room, itself novel to library use. This is a pick-up carrier, so called. Its purpose is to transport the various slips betwen four points in the delivery-room doing business with one another—the issue and return desks, the record trays and the pneumatic terminals. The carrier is a little cable railway, operated by electricity. At fixed points, at intervals upon the cable, are carriers which, as they reach a station, pick up a batch of slips waiting their arrival, carry them forward and deposit them at such succeeding station as may be their destination. The carrier is not a box, but is more in the nature of a hand, which clasps the batch of slips by closing the thumb and forefinger, and releases them automatically by the opening of these two.

releases them automatically by the opening of these two.

A new set of rooms has been created for the librarian and executive department, consisting of an ante-room, main office, private office, and a room for records and files. In addition, the rooms allotted to the work of the twenty-eight handlers have been enlarged and refitted with special apparatus, all the stacks have been connected by stairs, automatic lifts for the books, and two electric elevators for freight and employes have been put in; the orders department has been doubled in size; the janitor's offices have been rearranged, a public telephone and stenographic room have been added, and locker and luncheon rooms have been made out of storage space.

THE DILEMMA OF ABELL. From The Brooklyn Times.

Sporting Goods. 1899 MODELS.

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They are so much in advance of all presented in that they will be in greater demand a PRICES OF '99 MODELS. Juvenile Crescents.....\$25 Chain Crescents...... 35 Chainless Crescents..... 60

1809 Crescents ARE NOT 1808 Models, WESTERN WHEEL WORKS. SC WARREN ST., N. Y.

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offers to small families exquisitely furnished suites, with tiled bathroom, newest hotel conveniences, excellent meals, at very reasonable rates.

ONLY TWO SUITES LEFT.

Republican members of the police force who are not less deserving, and Mr. Abell naturally fears to incur the wrath of the party organization if he, as a Republican Commissioner, fails to insist that the promotions shall be equally divided. The organization cannot compel the reappointment of Commissioner Abell, but it is likely to have a good deal more influence upon the next Legislature than it has with Mayor Van Wyck. It is the possibility that the organization may succeed in legislating Mr. Abell out of office that makes the Commissioner uneasy and inclined to hesitate before he commits himself too far.

It was probably with the purpose of relieving Mr. Abell from this anxiety and bringing him into closer touch with the party leaders that his friends devised the project of a complimentary dinner. But, unfortunately most of the active party leaders were either disabled by the grip or hampered by previous engagements on the night of the dinner, and consequently they were unable to attend, and the Commissioner's anxiety is still unrelieved.

CHINA'S FIRST RAILWAY. From The Engineering Magazine.

NO FOOLS LIKE OLD FOOLS. From The Brooklyn Times.

From The Brooklyn Times.
It would have been well if the friends of Friend
Ellis, aged eighty, and George Aiger, axed seventynine, had appeased the quarrel of these venerable
citizens before the matter was permitted to come
into the court. It is not a pieasant thing at any
time to see an old friendship turned into enmity,
and it is infinitely worse when two old men, totters,
ing on the brink of the grave, are allowed to air,
their senile quarrels for the amusement of the
thoughtless. The quarrel might have been, and
should have been, composed without any needless
publicity.